

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	10/533,567	Confirmation No. 4563
Applicant	:	DOMEN <i>et al.</i>	
Filing or § 371 date	:	03 MAY 2005	
TC/A.U.	:	1793	
Office Action	:	July 24, 2008	
Docket No.	:	TAN-351	
Customer No.	:	62,479	

SECOND REQUEST FOR RECONSIDERATION

MAIL STOP: AF

Commissioner for Patents
Alexandria, VA 22314-1450

Sir:

This is a Second Request to Reconsider a final Office Action of July 24, 2008, subsequent to an Advisory Action of September 26, 2008.

Claims 1, 3, 5, 10 and 12 are presented for examination with Claim 1 being submitted for amendment in the response of September 16, 2008. Claims 3, 5, 10 and 12 are pending as originally filed, and Claims 2, 4, 6-9, 11 and 13-14 are canceled without disclaimer or prejudice.

In the previous response, amendments were submitted to Claim 1 to correct a typographical error to change “1.0” to “1.2” where support is found in originally filed Claim 2. No new matter was added. Nonetheless, the Advisory Action refused entry and alleged that the proposed amendment to Claim 1 raised new issues that would require further search and

consideration. However, the allegation is incorrect because the amendment, which seeks to enter the limitations of Claim 2 into the independent Claim 1, was pending as part of the originally filed, searched and examined claims. Notably, Claim 2 was canceled and incorporated into Claim 1 in the response of May 1, 2008, subsequent to a first Office Action. The subject matter of examined Claim 2 cannot raise new issues. Entry of the after-final amendment is therefore requested.

The Advisory Action made a new ground of rejection not necessitated by the amendment to Claim 1. It was argued that Takagaki *et al.* teaches a catalyst composition in Sections 2 and 3 (Results and Conclusion) where the Ti/Nb atomic ratio (z) ranges from **0.833 to 5**. However, this argument is, at a minimum, a new ground of rejection, and at most, a contradiction of the previous argument that the references do “not describe a catalyst in which “z” has a value between 1.2 and 1.4”. See Final Office Action at page 4, ¶ 3. The remarks cannot be said to be clarifying because the claimed atomic ratio z of “ $1.2 < z < 1.4$ ” overlaps the newly asserted range of 0.833 to 5.

Even assuming *arugendo* that a new ground of rejection has not been advanced, it is pointed out that the allegedly taught range of 0.833 to 5 relies upon different compounds in Takagaki *et al.* of $\text{Cs}_{1-x}\text{Ti}_{2-x}\text{Nb}_{1+x}\text{O}_7$ (Ti/Nb=2) or $\text{K}_{3-x}\text{Ti}_{5-x}\text{Nb}_{1+x}\text{O}_{14}$ (Ti/Nb=5) [*emphasis added*]. Notably, these compounds only form the salt of Cs or K, and not H, as in the claimed compound $\text{HTi}_x\text{Nb}_y\text{O}_5$. Moreover, Takagaki *et al.* does not even evaluate the Cs and K salts as a solid acid catalyst, and hence cannot be relied upon to assert the expanded range 0.833 to 5. In the case of

salts having H, the reference unequivocally teaches away from the claimed invention by suggesting that the Ti/Nb ratio of 0.818 is *better* than a ratio of 1.0, which would steer one of ordinary skill in the wrong direction. See Takagaki *et al.* in Sections 2 and 3 (Results and Conclusion); See also Response of September 16, 2008, at page 5, lines 14-19. The non-integer Ti/Nb ratio is clearly not a known design parameter. Hence, the claimed invention is unobvious.

In light of the foregoing, it is submitted that the application is now in condition for allowance. It is therefore respectfully requested that the rejection(s) be withdrawn and the application passed to issue.

Respectfully submitted,
HAHN & VOIGHT PLLC

/Roger C. Hahn/
Attorney for Applicants
Roger C. Hahn
Reg. No. 46,376